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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,825	09/08/2003	Kenichi Mizukami	450100-04759	2851

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EXAMINER	
PATHAK, SUDHANSHU C	
ART UNIT	PAPER NUMBER
2611	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/658,825	MIZUKAMI ET AL.	
	Examiner	Art Unit	
	Sudhanshu C. Pathak	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *Sept. 8th, 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *Sept. 8th, 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-25 are pending in the application.

Drawings

2. Fig.'s 11, 12A-D & 13A-E should be designated by a legend such as "Prior Art" since only that which is known is illustrated. Correction is required.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-6 (method) & 9-14 (communications system) & 20-25 (receiver) are rejected under 35 U.S.C. 102(e) as being anticipated by Yoo et al. (2002/0150392 A1).

In regards to Claims 1, 9 & 20, Yoo discloses a method (communications system) for synchronizing between a transmitter and a receiver in a communications system (Fig. 's 1-2, 7 & Paragraph 9, lines 4-9 & Paragraph 38), the method comprising: a transmission step of transmitting transmission data after inserting information about a reference time thereto at the transmitter end (Fig. 1 & Paragraph 6, lines 1-15 & Paragraph 8, lines 1-6 & Paragraph 14, lines 1-3); a clock comparison step of calculating, at the receiver end, a differential value between a count value of a decoder clock and the reference time of the transmission data (Fig. 7, element 51 & Paragraph 39, lines 1-15 & Paragraph 41); and a clock adjustment step of adjusting a frequency of the decoder clock based on the differential value (Fig. 7, elements 51-57, "e" & Paragraph 39).

In regards to Claims 2-6, 10-14 & 21-25, Yoo discloses a method (communications system) for synchronizing between a transmitter and a receiver in a communications system as described above. Yoo further discloses the clock comparison step calculates, at predetermined time intervals, the differential value between the count value of the decoder clock and the reference time, and a change amount thereof, and the clock adjustment step adjusts the frequency of the decoder clock based on the change amount (Fig. 7, element 51-57 & Paragraph 39, lines 1-15 & Paragraph 41 & Fig. 3 & Paragraph 14, lines 1-3) {Interpretation: The

reference discloses inserting PCR's at least once every 100ms and therefore, this is interpreted as a predetermined time interval}. Furthermore, it is inherent in the synchronization process to increase or decrease the decoder clock depending on the comparison error. Furthermore, it is also inherent depending on the error (change amount) being positive for it to mean increasing or slowing the decoder clock, depending on the nature of the arithmetic.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 7-8 (method) & 18-19 (communications system) are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoo et al. (2002/0150392 A1).

In regards to Claims 7 & 18, Yoo discloses a method for synchronizing between a transmitter and a receiver in a communications system (Fig. 's 1-2, 7 & Paragraph 9, lines 4-9 & Paragraph 38), the method comprising: a transmission step of transmitting transmission data after inserting information about a reference time thereto at the transmitter end (Fig. 1 & Paragraph 6, lines 1-15 & Paragraph 8, lines 1-6 & Paragraph 14, lines 1-3); a clock comparison step of calculating, at the receiver end, a differential value between a count value of a decoder clock and the reference time of the transmission data (Fig. 7, element 51 & Paragraph 39, lines 1-15 & Paragraph 41); and a clock adjustment step of adjusting a frequency of the

decoder clock based on the differential value (Fig. 7, elements 51-57, "e" & Paragraph 39). However, Yoo does not explicitly discloses adjusting the frequency of the encoder clock. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that Yoo discloses adjusting the clock of the decoder based on the differential value and further it would have been obvious to one of ordinary skill in the art that there is no criticality in adjusting the decoder clock or the encoder clock, this is a matter of design choice since inherently synchronization implies adjusting one of the two clocks.

In regards to Claims 8 & 19, Yoo discloses a method for synchronizing between a transmitter and a receiver in a communications system as described above. Yoo further discloses the clock comparison step calculates, at predetermined time intervals, the differential value between the count value of the decoder clock and the reference time, and a change amount thereof, and the clock adjustment step adjusts the frequency of the encoder clock based on the change amount (Fig. 7, element 51-57 & Paragraph 39, lines 1-15 & Paragraph 41 & Fig. 3 & Paragraph 14, lines 1-3) {Interpretation: The reference discloses inserting PCR's at least once every 100ms and therefore, this is interpreted as a predetermined time interval}. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that Yoo satisfies the limitations of the claim.

8. Claims 15-17 (communications system)) are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoo et al. (2002/0150392 A1) in view of Applicant Admitted Prior Art (AAPA).

In regards to Claims 15-17, Yoo discloses a method (communications system) for synchronizing between a transmitter and a receiver in a communications system as described above. Yoo further discloses the transmission data is streaming data at least including video data or audio data (Fig. 1, element 11 & Fig. 2, element 24 & Paragraph 6, lines 1-4 & Paragraph 11, lines 4-6). However, Yoo does not explicitly disclose the transmitter is configured to transmit the transmission data in real time after encoding the same, and the receiver is configured to apply a decoding process to the transmission data in real time based on the decoder clock and further wireless transmitting and receiving the data stream.

The AAPA discloses a transmitter is configured to transmit the transmission data in real time after encoding the same, and the receiver is configured to apply a decoding process to the transmission data in real time based on the decoder clock (Specification, Page 1, Description of Related Art, lines 1-8). The AAPA further discloses wirelessly transmitting and receiving the streaming data (Specification, Page 6, lines 15-18). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention that AAPA teaches the transmitter is configured to transmit the transmission data in real time after encoding the same, and the receiver is configured to apply a decoding process to the transmission data in real time based on the decoder clock, and further wireless transmitting and receiving the data stream, and this is implemented in the system as described in Yoo so as to avoid hardware complexity of the transmitter/receiver and increase the processing

time of the encoder/decoder and further increasing the range of the transmitter and receiver.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, it is recommended to the applicant to amend all the claims so as to be patentable over the cited prior art of record. A detailed list of pertinent references is included with this Office Action (See Attached "Notice of References Cited" (PTO-892)).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sudhanshu C. Pathak whose telephone number is (571)-272-3038. The examiner can normally be reached on M-F: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571)-272-3042.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Sudhanshu C. Pathak
Examiner
Art Unit 2611